

REPIN, L. [Riepin, L.]

"In search of X." Reviewed by L. Riepin. Nauka i zhyttia 12
no.12:61 D '62. (MIRA 16:8)

REFIN, M., PYATNITSKIY, M. P., KIPRACH, L.

Electrolysis

Electrolyzer-gas meter and its use in obtaining ethane. Khim. v shkole, no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November ¹⁹⁵²~~1953~~, Uncl.

RM 11, 11.

Oreschin, S. R. in.

"Collaboration between science and production." p. 67.
(Analele Romano-Sovietice. Seria Silvicultura-Industria Lemului Si A Hartiei.,
Series a II-a, v. 7, no.15, Sept/Oct. 1952, Bucuresti)

SO: Monthly List of East European Accessions, Vol. 2, No. 9, Library of Congress, September
1953, Uncl.

ABRAMOV, S.A., inzh.; ALIFANOV, I.N., inzh.; KARPOV, A.F., inzh.;
KOROTKOV, A.P., inzh.; KOLOSOV, B.P., inzh.; KUZNETSOV,
V.S., inzh.; NIKONOV, G.V., inzh.; REPIN, M.I., inzh.;
SEMENYUCHENKO, G.P., inzh.; SLOBODSKOY, L.M., inzh.;
TSUKANOV, Ye.V., inzh.; SHIFRIN, M.G., inzh.; BOL'SHAKOV,
A.S., inzh., retsenzent; KISELEVA, N.P., inzh., red.;
USENKO, L.A., tekhn. red.

[11D45 diesel locomotive] Teplovoznii dizel' 11D45. Moskva,
Transzheldorizdat, 1963. 95 p. (MIRA 16:7)
(Diesel locomotives)

L 8159=66 EPF(n)-2/T-2/ETC(m)/EWP(f) WW

ACC NR: AP5025065

SOURCE CODE: UR/0286/65/000/016/0116/0116

AUTHORS: Morgulis, P. S.; Vasil'chenko, P. A.; Shifrin, M. G.; Repin, M. I. B
51

ORG: none

TITLE: Method of increasing pick-up (acceleration) of diesel generators with gas turbine superchargers. Class 46, No. 174039

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 116

TOPIC TAGS: engine governor, supercharger, gas turbine, diesel engine

ABSTRACT: This Author Certificate presents a method for improving the pick-up of diesel generators with gas turbine superchargers by controlling the supply of exhaust gases to the turbine. To permit load variations without change in engine speed, the step-wise changes of turbine partiality (partial admission) are accomplished by supplying exhaust gases from one or several collectors to the turbine. The control is provided by a gas distributing valve which is activated according to engine load.

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JW

Card 1/1

UDC: 621.436

PHASE I BOOK EXPLOITATION SOV/4266

Progressivnaya tekhnologiya i vysokoproizvoditel'nyy instrument; opyt KhTGZ imeni Kirova (Advanced Processing and Highly-Productive Tools; Experience of the Kharkov Turbogenerator Plant imeni Kirov) Moscow, Mashgiz, 1960. 155 p. 5,500 copies printed.

Reviewer: P. Ye. Dudnik Engineer; Ed.: M. S. Soroka; Chief Ed. (Southern Division, Mashgiz): V. K. Serdyuk, Engineer.

PURPOSE: This booklet is intended for technical personnel and innovators.

COVERAGE: The booklet discusses the experience of innovators and technical personnel in introducing advanced processes and machine tools at the KhTGZ imeni Kirov (Khar'kov Turbogenerator Plant) for the manufacture of steam turbine rotors, for tapping coarse threads, processing steam turbine blades. Experience in introducing artificial cooling for interference fits, and in mastering the manufacture of welded steam-turbine rotors is described. The

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Advanced Processing (Cont.)

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booklet covers the advances in technology developed and introduced at the factory in the last few years. No personalities are mentioned. No references are given.

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Advanced Processing (Cont.)

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AVAILABLE: Library of Congress

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VK/rn/ec
11-14-60

ORSHIN, S.I., REPIN, N.V.

Lumbering

Collaboration of science and production. Les.prom. 12, no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, AUGUST 1952, ~~1952~~ Unclassified.

REPIN, N., kandidat tekhnicheskikh nauk.

New types of plumbing fixtures. Zhil.-kom.khoz. 6 no.3:18-20 '56.

(MLRA 9:8)

(Plumbing--Equipment and supplies)

REFIN, N.

Sanitarno-Tekhnicheskie Ustroistva Grazhdanskikh i Promyshlennyykh Zdanii
(Plumbing Installations of Civil and Industrial Buildings)

422 p. 1.75

SO: Four Continent Book List, April 1954

PA 70165

REF III, N. I.

USSR/Medicine - Epilepsy
Medicine - Therapeutics

Mar/Apr 1948

"Potassium Permanganate in the Therapy of Status
Epilepticus," N. I. Repin, Riga, 1 p

"Nevropatol i Psikhiat" Vol XVII, No 2

Description of two cases to show the great signifi-
cance of potassium permanganate in therapy for this
affliction. Submitted 29 Dec 1946.

FDB

70165

REPIN, N.I.

Potassium permanganate in the treatment of status epilepticus. Nevropatel.
i Psikhiat. 17, No.2, 67 et seq. '48. (MLRA 1:8)
(CA 47 no.20:10740 '53)

REPIN, N.N., kand.tekhn.nauk; SHKABEL'NIKOVA, L.P., inzh.; ROTIN, A.L.,
kand.tekhn.nauk

Results of the competition for the best design of a three-speed
controlling radiator cock. Vod. i san. tekhn. no.7:1-5 J1
'62.

(Radiators--Equipment and supplies) (MIRA 15:9)

REFIN, N.N.

Effect of gas on the operation of a deep well pump. Neft. khcz.
38 no.4:25-28 Ap '60. (MIRA 14:8)
(Oil well pumps)

POLIKARPOV, V.F.; REPIN, N.N.

New plumbing and heating equipment. Vod.i san. tekhn. 1 no.1:28-32
Ap'55.

(MLRA 8:11)

(Plumbing) (Heating)

REPIN, N.N., kandidat tekhnicheskikh nauk.

[Sanitary engineering in industrial buildings] Sanitarno-tekhnicheskie
ustroistva grazhdanskikh i promyshlennykh zdani. Moskva, Gos.izd-vo
lit-ry po stroitel'stvu i arkhitekture, 1953. 421 p. (MLRA 6:7)
(Sanitary engineering)

Revised, key added

REPIN, Nikolay Nikolayevich, kand.tekhn.nauk; SVESHNIKOV, I.P., kand.tekhn.
nauk, retsenzent; BELOUSOV, V.V., kand.tekhn.nauk, retsenzent;
KAZ'MIN-BALASHOV, A.I., inzh. nauchnyy red.; SMIRNOVA, A.P., red.
izd-va; TOKER, A.M., tekhn.red.

[Plumbing] Sanitarno-tekhnicheskie ustroistva zdaniy. Izd. 2-oe,
perer. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt., 1957. 358 p.
(Plumbing) (MIRA 11:2)

REPIN, N.N., kand. tekhn. nauk, red.; MUNITS, A.P., red.; MEL'NICHENKO,
F.P., tekhn. red.

[Sanitary engineering equipment for apartment houses built according
to standard economy plans; catalogue and technical information]
Sanitarno-tekhnicheskoe oborudovanie zhilykh zdaniy, stroiaschikhsia
po ekonomichnym tipovym proektam; katalog-tekhnicheskaya informatsiya.
Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam,
1958. 94 p. (MIRA 11:10)

1. Akademiya stroitel'stva i arkhitektury SSSR, Institut sanitarnoy
tekhniki.

(Sanitary engineering)

REPIN, N.N., kand.tekhn.nauk

Readers' letters. Vod.1 san.tekh. no.7:37-38 J1 '59.
(MIRA 12:9)

1. Nauchno-issledovatel'skiy institut santechniki Akademii
Stroitel'stva i arkhitektury SSSR.
(Water closets)

MURAV'YEV, I.M.; REPIN, N.N.

Characteristics of the performance of tubings. Neft.khoz. 37
no.12:24-30 D '59. (MIRA 13:5)
(Pipe)

ADAMOVICH, P.V.; BATURIN, V.V.; VAKHVAKHOV, G.G.; VAYNGAUZ, L.G.;
VILENSKIY, Ye.Ya.; GAMBURG, P.Yu.; DAVYDOV, Yu.S.; KARPIS,
Ye.Ye.; KUZNETSOVA, Z.I.; KOPIYEV, S.F.; LIVCHAK, I.F.;
LOBACHEV, P.V.; LEV, G.M.; NOTKIN, Ye.M.; PIRUMOV, A.I.;
POLIKARPOV, V.F.; PROTOPOPOV, A.P.; REPIN, N.N.; SLADKOV,
S.P.; TALIYEV, V.N.; TROITSKAYA, F.B.; FEDOROV, M.N.;
SHEVELEV, F.A.; SHKABEL'NIKOVA, L.P.; SHCHUTSKIY, A.I.;
SMIRNOV, L.I., inzh., nauchnyy red.; SMIRNOVA, A.P., red.
izd-va; MOCHALINA, Z.S., tekhn. red.; RODINOVA, V.R., tekhn.
red.

[Present level and prospects for the development of sanitary
engineering and the production of sanitary engineering equip-
ment] Sovremennyyi uroven' i perspektivy razvitiia sanitarnoi
tekhniki i proizvodstva sanitarno-tekhnicheskogo oborudova-
niia. Moskva, Gosstroizdat, 1962. 283 p. (MIRA 15:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut
sanitarnoy tekhniki.

(SANITARY ENGINEERING)

REPIN, N.N.; FEL'DMAN, V.I.

Conference at the Exhibition of Achievements of the National
Economy of the U.S.S.R. on problems of sanitary engineering
equipment. Vod.i san.tekh. no.5:39-40 My '62. (MIRA 15:7)
(Sanitary engineering--Equipment and supplies)
(Moscow--Exhibitions)

Freeing water from carbon dioxide. N. N. Kuznetsov
Khimistrol 7, 136-45(1935).—A critical discussion, with
illustrations, of the performance of the various scrubbing
systems used in U. S. S. R. for washing gas mixts. in the
production of synthetic NH_3 and freeing the circulating
water from CO_2 . Chas. Blanc

RLPIM, V.V., Cond Tech Sci —(diss) "Study of the phenomenon of pulsation
of ~~gas~~ wells." Mos, 1958. 7 pp (Lin of Higher Education USSR. Res Order of
Labor Red Banner Petroleum Inst in Acad I.L. Gubkin. Chair of ^{Hydro-}~~Exploitation~~
of Petroleum and Gas Deposits), 160 copies (NL, 43-58, 116)

REPIN, N.N....

Pulsations in lift wells. Izv.vys.ucheb.zav.: neft' i gaz. no.7:41-49
'58. (MIRA 11:11)

1. Moskovskiy neftyanyy institut im. akad. I.M. Gubkina.
(Petroleum engineering)

REPIN, N.H.

Combined calculations of reservoir and lift performances.
Izv.vys.ucheb.zav.; neft' i gaz 1 no.10:69-75 '58.

(MIRA 12:4)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M.Gubkina.
(Oil reservoir engineering)

REFIN, N.N.

Means for eliminating pulsations in flowing and lift wells.

Neft. khoz. 36 no.6:48-51 Je '58.

(MIRA 11:9)

(Oil wells--Gas lift)

MURAV'YEV, I.M.; REPIN, N.N.; LYUSHIN, S.F.

Characteristics of reservoir fluid flow after the shutting in of
flowing wells. Neft. khoz. 37 no.1:49-54 Ja '59.
(MIRA 12:3)

(Oil reservoir engineering)

REPIN, N.N.; BABALYAN, G.A.

Effect of surfactants on the lifting process. Izv. **vys.** ucheb.
zav.; neft' i gaz 4 no.8:51-57 '61. (MIRA 14:12)

1. Ufimskiy neftyanoy institut i Ufimskiy neftyanoy nauchno-
issledovatel'skiy institut.
(Oil wells--Gas lift)
(Surface-active agents)

REPIN, N.N.; D'YACHUK, A.I.; PORTNOV, V.I.

Effect of a pressure increase produced by the natural separation
of the components of two- and three-phase mixtures in a closed
system. Neft. khoz. 41 no.3:43-44 Mr '63. (MIRA 17:11)

L 41408-65 EWT(1)/EEC-4/EEC(t)/T/FCS(k) Pac-4/P1-4/PJ-4/P1-4 WR

ACCESSION NR: AP5010866

UR/0286/65/000/007/0037/0037

AUTHOR: Sorokin, A. A.; Repin, N. N.

36
B

TITLE: Coaxial slot antenna. Class 21, No. 169574

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 37

TOPIC TAGS: coaxial antenna, slot antenna, coaxial slot antenna

ABSTRACT: The proposed antenna consists of a segment of coaxial line with two symmetrical longitudinal slots along its axis. To ensure direct simultaneous feeding of the symmetrical slots, the exciter is made in the form of a dielectric plate which is located beside the internal conductor of the coaxial line in such a manner that the slots are situated above it. Orig. art. has: 1 figure. [BW]

ASSOCIATION: none

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Card 1/2

REPIN, N.N., kand. tekhn. nauk

Effect of the hydraulic parameters and the work cycle of
sanitary engineering equipment on the water consumption
in buildings. Sbor. trud. NIIST no.11:3-68 '62 (MIRA 18:1)

REPIN, N.N.; YAKHIN, S.C.

Studying the motion of triphase mixtures in vertical pipes. Izv. vys.
ucheb. zav.; neft' i gaz 3 no.6s43-47 '65. (MIRA 18:7)

STRUGOVETS, Ye.T.; REPIN, N.N.

Portable gas anchor. Mash. i neft. obor. no.5:33-34 '64.
(MIRA 17:6)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

LYUSHIN, S.F.; PEFIN, N.N.

Effect of flow velocity on the intensity of paraffin sedimentation
in pipes. Neft. khoz. 42 no.8:46-50 Ag '64.

(MIRA 17:9)

7
REPIN, Nikolay Nikolayevich, kand. tekhn. nauk; SMIRNOVA, A.P.,
red.

[Sanitary equipment and gas distribution to buildings]
Sanitarno-tekhicheskie ustroistva i gazosnabzhenie
zdanii. 3. izd., perer. i dop. Moskva, Stroiizdat, 1964.
324 p. (MIRA 17:8)

SKUL'SKIY, Yu.V.; TISHURA, V.I.; REPIN, N.N.; BEKHALOV, V.N.; KUZNETSOVA, Z.I.

Machine for the welding of cast iron pipe joints and fittings
for sanitary engineering systems. Avtom. svar. 16 no.11:72-
77 N '63. (MIRA 17:1)

1. Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR (for
Skul'skiy, Tishura). 2. Nauchno-issledovatel'skiy institut
sanitarnoy tekhniki (for Repin, Bekhalov, Kuznetsova).

REPIN, N.Ya., dotsent, kand. tekhn. nauk; BEREZNYAK, M.M., dotsent,
kand. tekhn. nauk; POTAPOV, M.I., gornyy inzh.

Improve boring and blasting operations in coal pits of the
southern Kuznetsk Basin. Ugol' 38 no.9:34-37 S '63.
(MIRA 16:11)

1. Kemerovskiy gornyy institut.

NAZAROV, P.P., dots., kand.tekhn.nauk; REPIN, N.Ya., gorn.inzh.

Analysis of modern boring practices in open pit mines of the
"Vakrushevugol'" trust. Nauch. trudy MGI no.22:51-62 '57.
(MIRA 11:9)

(Sakhalin Basin--Strip mining) (Boring)

REPIN, N.Ya., kand. tekhn. nauk; POTAPOV, M.I., gornyy inzh.

Choosing an efficient system of organizing work in Southern
Kuznetsk Basin mines. Ugol' 40 no.1;21 Ja '65. (41p. 12:4)

1. Kemerovskiy gornyy institut.

PR IN, Nite., kand. tekhn. nauk; POTAPOV, M. I. 1928.

Effectiveness of breaking the hard-to-break ore-bearing rock
in strip coal mines using the method of inclined small-diameter
boreholes. Vysv. delo no. 97/14:221-225 '86. (MIRA 18.11)

1 Kemerovskiy gosyuz. inst. 606

REPIN, N.Ia., docent, kand. tekhn. nauk; FAZALOV, G.T., gornyy inzh.;
SAPRYKIN, Ye.F., gornyy inzh.

Experience in the use of BSh-1m roller bits in open pit mines
of the southern Kuznetsk Basin. Ugol' 40 no.8:37-39 Ag '65.
(MIRA 18:8)

1. Kemerovskiy gornyy institut (for Repin). 2. Krasnogorskiy
ugol'nyy kar'yer (for Fazalov, Saprykin).

ARSLANOV, N.K., dotsent; REPIN, N.Ya., kand.tekhn.nauk

Student scientific and technological conferences. Izv. vys. ucheb.
zav. gor. zhur. no.8:150-152 '60. (MIRA 13:9)
(Mining engineering—Study and teaching)

REPIN, N.Ya., kand.tekhn.nauk; BARANOV, L.V., inzh.

Increase the effectiveness of boring and blasting operations
in Kuznetsk Basin mines. Shakht. stroi. 4 no.3:1-4 Mr '60.
(MIRA 13:11)

1. Kemerovskiy gornyy institut.
(Kuznetsk Basin--Coal mines and mining) (Blasting)
(Boring)

NAZAROV, P.P., dotsent, kandidat tekhnicheskikh nauk; REPIN, N.Ya.,
gornyy inzhener.

Investigation of roller bit boring of blast holes in strip mines.
Gor. zhur. no.4:22-24 Ap '57. (MLRA 10:5)

1. Moskovskiy gornyy institut.
(Boring machinery) (Strip mining)

REPIN, N. Ya. Cand Tech Sci -- (diss) "Perfection of rotary well drilling for blasting operations in coal pits." Mos, 1958. 12 pp (Min of Higher Education USSR. Mos Mining Inst im I. V. Stalin), 120 copies (KL, 11-58, 117).

REPIN, N.Ya., inzh.

Investigating rotary hole boring with auger and cutter tools tools.
Nauch. dokl. vys. shkoly; gor. delo no.1:65-76 '58. (MIRA 11:6)

1. Prestavlena kafedroy burovzryvnykh rabot Moskovskogo gornogo
instituta im. I.V. Stalina.
(Boring machinery)

REPIN, N.Ya., kand.tekhn.nauk

Selecting the power of the engine in rotary drilling of boreholes.
Ugol' 36 no.7:15-16 J1 '61. (MIRA 15:2)

1. Kemerovskiy gornyy institut.
(Drilling and boring machinery)

Behavior of rhodium in polarographic analysis. 1. B. A. Reppin (Moscow City Pedagog. Inst.). *J. Applied Chem.* (U.S.S.R.) 20, 46-54 (1947) (in Russian). Complex compds. of Rh were studied from the point of view of their suitability for polarographic detn. Chloride, oxalate, sulfate, and sulfite complexes are unsuitable on account of their reducibility in contact with Hg. Thiocyanate, tetrachloride and bisulfate complexes are stable towards Hg but their decompn. potential is too low. Complexes of the third group, those with phosphate, nitrite, cyanide, ammonia and pyridine, are both stable in contact with Hg and have decompn. potentials more neg. than mol. O. Solns. were prepd. by adding to a Rh³⁺ salt soln., a soln. of the "background" salt until decolorized, which in some cases required heating. Polarograms of phosphate complexes, prepd. with Na₂P₂O₇, were shifted by 0.7 v. towards more pos. potentials relative to the background (in 0.5 N soln.) and showed no wave corresponding either to reduction of Rh or to depolarization of H; its absence, and the identical shapes of the complex and blank curves, are tentatively ascribed to simultaneous reduction of Rh³⁺ → Rh²⁺ and of H₂O₂. Polarograms identical in shape and only shifted parallel to each other are also found with blank NaNO₃ (0.5 N) and with Na₂[Rh(CN)₆]. Cyanide complexes are difficult to prep. and

furthermore dissolve Hg. Complexes with NH₃, prepd. from NH₄OH (0.1-0.5 N) and (NH₄)₂RhCl₆ give polarograms shifted by 0.7 v. relative to the background and show no Rh wave but do exhibit depolarization of H. The only complex compds. suitable for polarographic analysis proved to be those with C₅H₅N (Py) which can only be successfully prepd. by dilg. Py with water (1:2), dilg. HCl d. 1.19 with water (1:1), mixing 2 vols. of the 1st soln. with 1 vol. of the 2nd (pH > 7), adding to 4-5 ml. of this "background" 0.1-0.5 ml. of a soln. of (NH₄)₂RhCl₆ (1 g./l Rh), and heating to boiling until decolorized. The decompn. potential of the complex (probably [Rh Py₃ Cl]²⁺) is shifted by 0.5 v. relative to the background; polarograms show no H depolarization and do show a distinct wave of reduction of Rh; the wave becomes a peak (precluding quantitative detn.) with Py concns. in excess of the amt. given, also at Rh concns. from 40 mg./l. upwards. The lower limit of Rh concn. is approx. 1 mg./l. where the error (using 2 v.) can be as low as about 2%. The reaction at the dropping Hg cathode appears to be [Rh Py₃ Cl]²⁺ + e → [Rh Py₃ Cl]⁺, i.e. Rh³⁺ is reduced to Rh²⁺. Further reduction through further polarization cannot be attained as decompn. of the Py.HCl background takes place before that.

N. Thon

REPIN SA

Polarographic determination of rhodium in the presence of iridium and platinum. S. A. Repin. *J. Applied Chem. (U.S.S.R.)* 20, 65-62(1947)(in Russian).—(1) In contrast to the Rh^{3+} ion, Ir^{3+} is not reduced by Hg, except in strongly acid soln. (2N HCl) on heating, nor is it reduced by H₂, while black Rh metal is pptd. from $(NH_4)_2RhCl_6$ (1 g./l. Rh) by H₂ (2-3 bubbles per sec.) within 30 min. However, Ir^{3+} (in $(NH_4)_2IrCl_6$) is readily reduced down to Ir metal by both Hg and H₂. Polarograms of $(NH_4)_2IrCl_6$ in NaCl, phosphate and tartrate show continuous merging of the lines of Ir and of the background; polarographic detn. of Ir is possible only in acid soln., in the absence of Rh and Pt. (2) Both Pt^{4+} and Pt^{2+} ions are readily reduced by Hg. Stable complexes with C_6H_5N (Py) can be prepd. only with Pt^{4+} , in the same way as the corresponding Rh^{3+} compds. (see the following abstract). However, polarographic detn. of Pt in such solns. is not feasible owing to marked depolarization of H₂. (3) Rh can be successfully detd. by polarography in the presence of Pt; the soln. was prepd. by mixing solns. of $(NH_4)_2RhCl_6$ and $(NH_4)_2PtCl_6$ (1 g./l. metal), adding to 0.2 ml. of the mixt. 1.8 ml. of the Py.HCl soln. previously

described (see following abstract), heating to boiling, cooling, adding 2-3 drops of satd. Na_2SO_3 , heating (to reduce Pt^{4+} to Pt^{2+}) and cooling. In this soln., contg. 20 ml./l. each of Rh and Pt, polarograms show a Rh wave distinctly sepd. by 0.3 v. from that of catalytically depolarized H₂. The Rh wave is not affected by Pt as long as the latter is present at not over 94% (with respect to Rh + Pt); Ir has no effect; the mean error for Rh is not over 2-3%. (4) To det. Rh in a Pt-Ir-Rh alloy (contg. not over Pt:Rh = 10:1), the sample is converted into chlorides, the soln. to contain 20-60 mg./l. Rh; the no. of drops of satd. Na_2SO_3 necessary to reduce Pt^{4+} in 1 ml. of the soln. is detd. empirically by the disappearance of the color due to Pt^{4+} (the color of Ir^{3+} may remain); 1 ml. of the soln. is mixed with 4 ml. of the Py.HCl soln. (cf. following abstract), heated to boiling, cooled, treated with the preliminarily established amt. of Na_2SO_3 .

boiled, cooled and polarographed after 20-30 min. bubbling of N₂. If a peak appears, the detn. is repeated with a smaller amt. of sample soln.

N. Thon

BOCHIN, V.P.; REPIN, S.A.

Technology of isotopically enriched chromium and iron foils for
nuclear research. Prib. i tekhn. eksp. 8 no.5:212-214 S-0 '63.
(MIRA 16:12)

7

Use of chloramine in quantitative analysis. I. S. A. Repin and O. S. Lobakhina (Moscow Pharm. Inst.) *Zh. Anal. Khim.* 6, 39-42 (1951).--The oxidative properties of chloramine-T are reviewed. It can be used as oxidant in any mineral acid except HNO_3 . When the excess of the chloramine is determined by back titration, it is preferable to use H_2SO_4 , H_3PO_4 , or AcOH rather than HCl to prevent loss of Cl^- . M. Horsch

REPIN, S. I.

"A Case of Leiomyoma of the Small Intestine Unique in Form and Origin," Khirurgiya, No. 8, 1949. Mbr., Surgical Dept., Hosp. No. 12, Gor'kiy, -1949-. Mbr., Dept. Pathology, Ukr. Inst. Traumatology & Orthopedics, -1949-.

REPIN, S.P. (Moskva)

Some characteristics of leeward air waves. Meteor. i gidrol.
no. 1:35-38 Ja '53. (MLRA 8:9)
(Atmosphere)

LASHKAREV, K.I.; RIZON, S.S.

Using a tester designed by the Gromy Institute Scientific Research Institute. Neft. khok. 41 no. 722D-65 J1:64 (MIRA 1967)

L 29804-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD
ACC NR: AP6015063 (N) SOURCE CODE: UR/0363/66/002/005/0814/0822

AUTHOR: Aleksanyan, I. T.; Repin, V. A.

ORG: none

TITLE: Effect of tensile deforming and heat treatment on the electrical conductivity of polycrystalline copper films 47

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 5, 1966, 814-822

TOPIC TAGS: electric conductivity, copper film, metal deformation, *metal heat treatment, resistivity*

ABSTRACT: The change in the resistivity of vacuum-deposited copper films in the course of active tension and heat treatment and the structure of heat-treated, freshly deposited, and deformed specimens were investigated. It was shown that the decrease in the resistivity of heat-treated copper films during tension is caused by the formation of a deformed texture. Heat treatment leads primarily to a homogenization of the grain size and to development of recrystallization processes. The anomalous strength characteristics displayed by the copper films are due to the fixation of dislocations by the interfaces of the specimen and point defects. The

UDC: 539.24

Card 1/2

L 29804-66

ACC NR: AP6015063

mechanism of deformation of the films is dislocatory in character and consists in the alternation of intergranular processes associated with polygonization. The turning of the grain boundaries and gaps are caused by dislocations of these boundaries. Orig. art. has: 12 figures. 14

SUB CODE: 11/ SUBM DATE: 01Jul65/ ORIG REF: 008/ OTH REF: 010

Card 2/2 *N*

SUKHAREV, Ye.M.; REPIN, V.G.

Correlator using linear filters. Trudy MFTI no.2:47-57 ' 58.
(MIRA 11:12)
(Correlation (Statistics))

REPIN, V. G. and SUKHAREV, Ye. M.

"Linear-filter Correlator" ,^{p47}/in book Research in Physics and Radio Engineering,
Moscow, Oborongiz, 1958. 132p.

The book is a collection of 13 articles written by instructors and graduate and under graduate students of the Moscow Inst. of Physics and Technology. The articles discuss problems in radio physics, optics and physics.

16.6100

16.9500 (1031, 1121, 1132)

21798
S/103/61/022/004/005/014
B116/B212

AUTHORS: Bol'shakov, I. A., Repin, V. G. (Moscow)

TITLE: Problems of non-linear filtration. I. With one parameter

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 4, 1961, 466-478

TEXT: The studies on a linear filtration of a random process from an additive conversion with another random process are based on the fundamental work of Kolmogorov and Wiener. The authors solve the problem of the filtration of a random process (one parameter) from a non-additive conversion of it with another random process (parameter: carrier signal) by making certain assumptions about these two random processes. The operators performing the filtration are found. It is shown that the feedback principle may be applied to realize these operators. An example is brought from the field of radio engineering. Here, filtration is called the continuous measuring of a certain random quantity forming the parameter of the received signal (also a random parameter in a general case). The problem of the Bayes type filtration is solved where the a priori statistics of the parameters are known. The signal, in the case investigated, depends on a parameter which has a

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21798

S/103/61/022/004/005/014
B116/B212

Problems of ...

Gaussian distribution. The following chapters deal with: cases of several parameters, the functional of parameters, the non-Gaussian parameters and the selection cases which depend on the valuations. The authors do not bring any mathematically accurate argumentations for results obtained. A non-linear filter shown in Fig. 2 is first obtained by assuming that mismatching is small and the signal will change rapidly. The optimum non-linear filter in question consists of a single-circuit servosystem with a non-linear discriminator which will separate out the derivation of the logarithm of the credibility function with respect to $\lambda(t)$ at the point $\lambda^*(t)$. $y(t)$ denotes a random function having the parameter $\lambda(t)$. $Z(t)$ is a measure for the error between $\lambda(t)$ and $\lambda^*(t)$. The system is closed by linear smoothing circuits, and it is shown that these will be only linear for a Gaussian parameter error distribution. It mainly differs from the Wiener filter (Fig. 2) in that there is a very non-linear discriminator element (for the input signal $y(t)$ and also in that a feedback (which is shifting the parameter toward the linear section of the discrimination characteristic following a parameter change) is necessary. The logarithm of the credibility function is written as

$$L(t_0, t)(y, \lambda) = \int_{t_0}^t l(y, \lambda; \tau) d\tau \quad (14).$$

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Problems of ...

Here, $l(y, \lambda, \tau)$ basically does not depend on the realization of $y(t)$ and $\lambda(t)$ in the interval (t_0, τ) but on the $y(t)$ and $\lambda(t)$ values of the interval preceding τ with the order of magnitude of a correlation time τ_y of a signal $y(t)$. The operation of the discriminator belonging to an optimum meter consists in determining

$$Z(t) = - \frac{\partial l(y, \lambda^*(t); t)}{\partial \lambda} \quad (15)$$

from the values of the signal $y(t)$ and the running determination of $\lambda^*(t)$. Several examples are brought which show the representation of the logarithm of the credibility function according to expression (14), the parameter form and its coding method are not realized. It is pointed out that the representation of filters with a servosystem will allow to judge previous results differently and also will furnish various new results, even, if the methods to find the Wiener filters are known in a number of cases. There are 6 figures and 4 Soviet-bloc references.

SUBMITTED: October 11, 1960

Card 3/4

Problems of ...

Legend to Fig. 2: Simplified
single-circuit diagram.
1) discriminator; 2) smoothing
circuits.

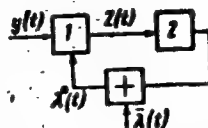


Fig. 2

Card 4/4

BOL'SHAKOV, I.A. (Moskva); REPIN, V. G. (Moskva)

Problems of nonlinear filtration. Part 1 . Case of one parameter.
Avtom i telem.22 no.4:466-478 Ap '61. (MIRA 14:4)
(Radio filters)

REPIN, V.G. (Moskva)

Solution of a filtration problem with limited a priory statistics.
Avtom.i telem. 23 no.8:1108-1111 Ag '62. (MIRA 15:7)
(Information theory) (Radio filters)

BAKUT, P.A.; BOL'SHAKOV, I.A.; GERASIMOV, B.M.; KURIKSHA, A.A.;
REPIN, V.G.; TARTAKOVSKIY, G.P., prof.; SHIROKOV, V.V.;
ALEKSANDROVA, A.A., red.; BELYAYEVA, V.V., tekhn. red.

[Problems of the statistical theory of radar] Voprosy statisticheskoi teorii radiolokatsii. [By] P.A. Bakut i dr.
Pod obshchei red. G.P. Tartakovskogo. Moskva, Sovetskoe radio. Vol.1. 1963. 423 p. (MIRA 16:5)
(Radar)

BURSHTBYN, Il'ya Yefimovich; REPIN, Vladimir Georgiyevich; MANAKIN, N.V.,
redaktor; EVENSON, I.M., tekhnicheskiiy redaktor

[Production of wood screws] Proizvodstvo shurupov. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry chernoi i tsvetnoi metallurgii, 1955.
350 p. (MIRA 8:7)
(Screws)

L 45828-65 EEO-2/EWT(1)/EEC(t)/EED-2 Pm-4/Pn-4/Pac-4/Pi-4/Pj-4/Pk-4/Pl-4

WR

ACCESSION NR AM5002719

BOOK EXPLOITATION

59
S/ B+1

Bakut, P. A.; Bol'shakov, I. A.; Gerasimov, B. M.; Kuriksha, A. A.; Repin, V. G.;
Tartakovskiy, G. P.; Shirokov, V. V.

Problems of the statistical theory of radar²⁴ (Voprosy statisticheskoy teorii
radiolokatsii), v. 2., Moscow, Izd-vo "Sovetskoye radio", 1964, 1078 p. illus.,
biblio., index. Errata slip inserted. 6,000 copies printed.

TOPIC TAGS: radar, statistical theory

PURPOSE AND COVERAGE: The second volume of the book is devoted to the theory
of radar measurements and problems of target resolution. A general theory of
radar measurements is developed which contains the analysis of tracking and
nontracking measurement systems, linear and nonlinear, and the synthesis of
optimal systems of measuring the motion parameters of targets which change over
time and their combinations. On the basis of this theory, the book presents
an analysis and synthesis of long-range systems, systems of speed measurement,
and angular measurement systems. Coherent and incoherent signals are investi-
gated. In considering the problems of target resolution, the possibility of
resolving reflected signals is studied and optimal receivers in this respect
are found. Optimal resolution systems in detection and measurement of

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ACCESSION NR AM5002719

coordinates are also investigated. The book is intended for researchers and engineers concerned with problems of radar and for students and graduate students. Many problems of the general theory are also of interest to those concerned with theoretical problems in all fields based on the theory of statistics, particularly in automatic control.

TABLE OF CONTENTS [abridged]:

Ch. VI. General regularities of radar measurements --	3
Ch. VII. Measurement of range with a coherent signal --	255
Ch. VIII. Measurement of range with an incoherent signal --	432
Ch. IX. Measurement of speed --	523
Ch. X. Measurement of angular coordinates with a coherent signal --	648
Ch. XI. Measurement of angular coordinates with an incoherent signal --	823
Ch. XII. Joint measurement of several coordinates --	869
Ch. XIII. Resolution --	960
Bibliography --	1068
Subject Index --	1072

Card 2/32

L 0474-2

SESSION NR: AP5001759

S/0103/64/025/012/1656/1669

AUTHOR: Bol'shakov, I. A.; Repin, V. G.

B

TITLE: Problems of nonlinear filtration. Part 2 - Multivariable case

SOURCE: Avtomatika i telemekhanika, v. 25, no. 12, 1964, 1656-1669

TOPIC TAGS: filtration, nonlinear filtration, multivariable servo

ABSTRACT: In Part 1 of the authors' work (Avt. i Telemekh., v. 22, no. 4, 1961), the problem of optimal measurement (filtration) of one random variable parameter having specified statistics and encoded in desirable components (signal) mixed with a fluctuation noise was considered. In the present article, the results are extended over the case of several random variable parameters, with several input signals. A set is considered of m random signals $y^{(1)}(t), y^{(2)}(t), \dots, y^{(m)}(t)$, all or some of which being dependent on l interconnected random time-variable parameters $\lambda^{(1)}(t), \lambda^{(2)}(t), \dots, \lambda^{(l)}(t)$. At time moments $t_1, t_2, \dots, t_n$ the signals and parameters will be:

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L 003 03

ACCESSION NR: AP5001759

$$\{y_1^{(1)}, \dots, y_1^{(m)}; y_2^{(1)}, \dots, y_2^{(m)}; \dots, y_n^{(1)}, \dots, y_n^{(m)}\} = y,$$

$$\{\lambda_1^{(1)}, \dots, \lambda_1^{(n)}; \lambda_2^{(1)}, \dots, \lambda_2^{(n)}; \lambda_n^{(1)}, \dots, \lambda_n^{(n)}\} = \lambda,$$

where $y = \{y_1, \dots, y_n\}$ and $\lambda = \{\lambda_1, \dots, \lambda_n\}$ are compound column-vectors with subcolumn-elements $y_i = \{y_i^{(1)}, \dots, y_i^{(m)}\}$ and $\lambda_i = \{\lambda_i^{(1)}, \dots, \lambda_i^{(n)}\}$. Based on these premises, integral equations are set up and approximately solved for a few particular cases of optimal filtration. The structure of a multivariable measuring-filtering circuit is synthesized for a Gaussian a-priori distribution of $P_0(\lambda)$; two-loop and single-loop block diagrams are presented. Characteristics of a multivariable discriminator and smoothing circuits are studied. Practical application is illustrated by an example of measuring the time delays of two fluctuating harmonic-FM signals. Orig. art. has: 6 figures and 50 formulas.

ASSOCIATION: none

SUBMITTED: 27Nov63

ENCL: 00

SUB CODE: EC

NO REF SOV: 008

OTHER: 002

Card 2/2

REPIN, V.I., general-leutenant v otstavke, chlen Kommunisticheskoy partii
Sovetskogo Soyuza s 1908.g.

Communists, people of principle. Komm. Vooruzh. Sil 5 no.23:37-44 D '64.
(MIRA 18:1)

MILYANOVSKIY, A.A.; KHRAPOV, A.P.; NIKOL'SKIY, E.A.;
RUPIN, A.M.

Conditions for improving the hygienic quality of milk.
Veterinariya 42 no.5:96-98 My '65. (MIR 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii (for Milyanovskiy). 2. Glavnoye upravleniye veterinarii
Ministerstva sel'skogo khozyaystva SSSR (for Khrapov, Nikol'skiy,
Rupin).

ARKHANGEL'SKIY, I.I., prof.; IBELIN, V.N.

ways for improving the quality of milk. Veterinariya 42 no.10:73-75
0 '65. (VIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii (for Arkhangel'skiy). 2. Starchiy veterinarnyy vrach
Sverdlovskaya rayonnyaya veterinarii Ministerstva sel'skogo
khozyaystva USSR (for Rybin).

*Experiences in the Welding of [Aluminium Alloy] Tanks. G. P. Kravtsov and V. S. Iepin (*Aviatsium. (Air Ind.)*, 1940, (4:6), 15-19; *Chem. Zentr.*, 1941, 112, (1), 274). [In Russian.] In butt- and lap-welding experiments with AMZP alloy (containing aluminium 97.4, manganese 1.32, copper 0.05, and iron 0.04) at 100°C., using AMZ or AK alloy (containing 4.0% Fe) as electrode, welding rods, the butt welding resulted in an output 1.5-2 times higher than lap welding, a seam strength 10-15% higher, and also a greater corrosion resistance. This may be attributed to the different effect of fluxes in the lap method, which cannot be completely eliminated even by rinsing twice with hot water and once with $K_2Cr_2O_7$ solution; the fluxes penetrating into the overlap give rise to pores in the basis metal. The formation of flaws was also observed, which may have resulted from unsuitable pre-treatment of the metal for welding. The flux used contained: $NaCl$ 35, KCl 43, $LiCl$ 8, NaF 9, and KF 5%. It lost its oxidizing effect (after 15-20 minutes) on premature application to the metal, thus leading to the production of seams containing oxides. The quality of the water used for rinsing the flux proved also to be of importance (the tensile strength of the weld being 12 kg. mm.² on using tap water and 12.9 kg. mm.² in the case of distilled water). Thus, it was valuable to use only distilled water and to apply the flux not more than 10-15 minutes before welding is started. In welding flanges, only the welding rod should be covered with flux. X-ray analysis proved unsatisfactory for testing of the

welds; the application of the vibration test, visual inspection, and density determinations are recommended for this purpose.

METALLURGICAL LITERATURE CLASSIFICATION

27

***Experiences in the Welding of [Aluminium Alloy] Tanks.** (I. P. Knyasev and V. S. Repin (*Air Ind.*), 1940, (4:5), 15-19; (*Chem. Zentr.*, 1941, 112, (1), 274).—[In Russian.] In butt- and lap-welding experiments with AMZP alloy (containing aluminium 97.6, manganese 1.32, copper 0.46, and iron + silicon 1.03%), using AMZ or AK alloy (containing 4-6% silicon) welding rods, the butt-welding resulted in an output 15%, higher than lap-welding, a seam strength 10-12% higher, and also a greater corrosion-resistance. This may be attributed to the deleterious effect of fluxes in the lap method, which cannot be completely eliminated even by rinsing twice with hot water and once with $K_2Cr_2O_7$ solution; the fluxes penetrating into the overlap give rise to pores in the basic metal. The formation of flaws was also observed, which may have resulted from unsuitable pre-treatment of the metal for welding. The flux used contained: $NaCl$ 35, KCl 43, $LiCl$ 8, NaF 9, and KF 5%. It lost its deoxidizing effect (after 15-20 minutes) on premature application to the metal, thus leading to the production of seams containing oxides. The quality of the water used for mixing the flux proved also to be of importance (the tensile strength of the weld being 12 kg./mm.² on using tap water and 12.9 kg./mm.² in the case of distilled water). Thus, it is advisable to use only distilled water and to apply the flux not more than 10-15 minutes before welding is started. In welding flange, only the welding rod should be covered with flux. X-ray analysis proved unsatisfactory for testing of the

welds; the application of the vibration test, visual inspection, and density determinations are recommended for this purpose.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

NEYFAKH, S.A.; REPIN, V.S.

Protein factor in heart mitochondria intensifying glycolysis.
Vop. med. Khim. 9 no. 3:324-326 My-Je '63. (MIRA 17:9)

1. Laboratoriya enzimologii otdela biokhimii Instituta
eksperimental'noy meditsiny AMN SSSR, Leningrad.

AVRAMOV, I.A.; REBIN, V.S.

Isolation of highly purified phosphoglyceric kinase from the skeletal muscles in rabbits. Biokhimiia 30 no.6:1187-1193
N-D '65. (MIRA 19:1)

1. Laboratoriya biokhimicheskoy genetiki Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad. Submitted February 18, 1965.

GURVICH, G.I.; REPIN, V.Ya.

Effect of surgical exclusion of the visual, auditory and olfactory
analysors on the resistance of animals to acute oxygen deficiency.

Trudy Inst. fiziol. AN BSSR 1:232-237 '56 (MLRA 10:5)
(BRAIN--LOCALIZATION OF FUNCTIONS) (ANOXEMIA)

BRYUKHANOV, V.; REPIN, Yu., doverennyy vrach; PETROV, K., doverennyy vrach

Life dictates. Okhr. truda i sots. strakh. 6 no.11:18-20
N '63. (MIRA 16:11)

1. Predsedatel' Chelyabinskogo sel'skogo oblastnogo soveta
professional'nykh soyuzov (for Bryukhanov).

L 45385-65 EWT(d) Pq-4 IJP(c)

ACCESSION NR: AP5010628

UR/0040/65/029/002/0226/0235

AUTHOR: Repin, Yu. M. (Sverdlovsk)

TITLE: On approximate substitution of a system with ordinary time-lag dynamic systems

SOURCE: Prikladnaya matematika i mekhanika, v. 29, no. 2, 1965, 226-235

TOPIC TAGS: ordinary differential equation, partial differential equation, approximation method, asymptotic stability

ABSTRACT: The problem of approximately substituting a system of differential equations with a system of delay-argument ordinary differential equations is discussed in some detail. The following type of single, constant lag differential equations is considered:

$$\frac{dx_i}{dt} = X_i(t, x_1(t), \dots, x_n(t), x_1(t-\tau), \dots, x_n(t-\tau))$$

(i = 1, \dots, n)

where X_i is determinate and continuous along the set of arguments

$$|x_1| + \dots + |x_n| < H, |y_1| + \dots + |y_n| < H \text{ при } t \geq A$$

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ACCESSION NR: AP5010628

It is assumed that X_1 satisfies the Lipschitz conditions along x and y

$$|X_1(t, x, y) - X_1(t, x^0, y^0)| \leq L_1 \sum_{k=1}^n |x_k - x_k^0| + \\ + L_2 \sum_{k=1}^n |y_k - y_k^0| \text{ at } t \geq A$$

and $X_1(t, 0, 0) = 0$. Substituting the delay elements of the circuit with m aperiodic units, a set of approximate ordinary differential equations is obtained of order $n(m+1)$

$$\frac{dz_0}{dt} = X(t, z_0, z_m), \quad z_j = (z_{1j}, \dots, z_{nj}) \\ \frac{dz_1}{dt} = \frac{m}{\tau} (z_0 - z_1), \dots, \frac{dz_m}{dt} = \frac{m}{\tau} (z_{m-1} - z_m) \quad (j=0, 1, \dots, m)$$

It is shown that the accuracy of such a substitution depends on the order of the differential equations. Two theorems are introduced to show that the transition to the approximate system and its inverse are uniformly, asymptotically stable in the trivial solution of the original set of differential equations. Orig. art. has: 64 equations.

Card 2/3

L 45385-65

ACCESSION NR: AP5010628

ASSOCIATION: none

SUBMITTED: 19Nov64

ENCL: 00

SUB CODE: MA

NO REF SOV: 003

OTHER: 000

by
Card 3/3

MEYERSON, F.Z.; REPIN, Yu.M.; GODIN, V.P.

Role of correlation between the physiological function and genetic apparatus of the cell in the appearance and involution of myocardiac hypertrophy. Dokl. AN SSSR 152 no.6:1483-1486 0 '63.

(MIRA 16:11)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR.
Predstavleno akademikom A.N. Bakulevym.

*

REF ID: A66111, Ref ID: A66111

Original structure of the atom, found by [unclear] [unclear] [unclear]
(MTRA 17:10)

L 65247-65 EWT(d)/EPF(n)=2/T/EWP(1) IJP(c) WW/BC
 ACCESSION NR: AP5021846 55, u4 UR/0280/65/000/004/0003/0013 55, u4
 AUTHOR: Krasovskiy, N. N. (Sverdlovsk); Repin, Yu. M. (Sverdlovsk); Tret'yakov, V. Ye. (Sverdlovsk) 55, u4
 TITLE: Certain game situations in control theory 49
 SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1965, 3-13
 TOPIC TAGS: automatic control theory, automatic control system, game theory 55
 ABSTRACT: The problem of pursuit of one controlled object by another represents an important branch of the modern theory of control systems. The law of control is usually chosen in such a way that the corresponding algorithm materializing the control commands can be conveniently realized. However, this type of approach utilizing an a priori chosen control law does not always result in an optimum pursuit utilizing inexpensive means. To invert the problem and start from the optimization requirement the authors view the pursuit problem as a game between two players one of which tries to reduce and the other to increase a certain index characterizing the result of the game. Here the first player represents the control system while the second player represents the pursued object. The control laws represent the strategy of the game and the time of encounter is the characterization index. This article describes a particular method for the choice of controls, and the general results are illustrated on examples of simple mechanical.
 Card 1/2

L 65247-65
ACCESSION NR: AP5021846

motion modeled on computers (motion of two mass points along a horizontal axis subject to control forces u and v limited by the conditions

$$\int_0^{\tau} u^2(t) dt \leq \mu^2(\tau), \quad \int_0^{\tau} v^2(t) dt \leq \nu^2(\tau).$$

at the instant of encounter one requires the equality of velocities as well as of positions). Orig. art. has: 36 formulas and 10 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, MA

NO REF SOV: 002

OTHER: 002

Card 2/2

REPIN, Yu.M. (Sverdlovsk)

Approximate replacement of systems with a time lag by ordinary
dynamic systems. Prikl. mat. i mekh. 29 no.2:226-235 Mr-Apr '65.
(MIRA 18:6)

ABSTRACT: E.A. Barbashin and M.A. Skalkina [Ref 1] and S.P. Gorshin [Ref 2] have formulated theorems on the stability after the first approximation and on the stability for permanently acting disturbances for systems of ordinary differential equations. The author transfers these theorems to the system

The functions X_i depending on the argument $mn + 1$ are assumed to be defined and continuous in $t \geq A$, $|x_{1j}| + \dots + |x_{nj}| < H$,

CIA-RDP86-00513R0014446

On the Stability of the Solutions of Equations With
Retarding Argument

40-21-2-13/22

furthermore they are assumed to satisfy the Lipschitz conditions uniformly with respect to t in x and $Y_1(t, 0, \dots, 0) \equiv 0$. The functions $\tau_j(t)$ defined for $t \geq A$ are bounded. As permanently acting disturbances here appear small deformations of the dead times $\tau_j(t)$. There are 6 references, 5 of which are Soviet, and 1 English.

SUBMITTED: May 27, 1955

AVAILABLE: Library of Congress

1. Equations--Solutions 2. Differential equations 3. Transformations 4. Analytic functions

Card 2/2

REFIN, Yu.M.

Controlled internal cooling in the intestinal tract in the surgical
clinic. Vest.khim. 84 no.3:20-25 Mr '60. (MIRA 13:12)
(HYPOTHERMIA)

REFIN, Yu.M.

Experimental study on reversibility in cardiac hypertrophy.
Biul. eksp. biol. i med. 57 no.3:37-41 Mr '64.

(MIRA 17:11)

i. laboratoriya fiziologii i patologii serdtsa Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR prof. V.V. Parin) AMN SSSR.

REFIN, Yu.M.

Reversibility of cardiac hypertrophy caused by "altitudinal"
hypoxia. Biul. eksp. biol. i med. 56 no.9:46-49 S '63.

(MIRA 17:10)

1. Iz laboratorii fiziologii i patofiziologii serdechnoy deya-
tel'nosti (zav. - deystvitel'nyy chlen AMN SSSR V.V. Parin) Insti-
tuta normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.
Predstavlena deystvitel'nyy chlenom AMN SSSR V.V. Parinym.

MONAYENKOV, A.M.; REPIN, Yu.M.

Autoimmunological responses of the organism to the development
and reversibility of compensatory variations in the heart.
Dokl. AN SSSR 152 no.4:1009-1011 0 '63. (MIRA 16:11)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR.
Predstavleno akademikom A.N. Bakulevym.

*

REPIN, Yu.M. (Sverdlovsk); TRET'YAKOV, V.Ye. (Sverdlovsk)

Solution of a problem on the analytical design of controllers
using electronic analog computers. Avtom. i telem. 24 no.6:
738-743 Ja '63. (MIRA 16:7)

(Automatic control)
(Electronic analog computers)

L 12612-63

EWT(1)/BDS/ES(a)/ES(b)/ES(c)/ES(k) AMD/AFTTC

Pb-4 A/DD

ACCESSION NR: AP3001506

S/0219/63/055/005/0037/0040

AUTHOR: Repin, Yu. M. (Director and Member of Academy of Medical Sciences SSSR)

TITLE: Effect of the degree of myocardial hypertrophy on body resistance to "high altitude" hypoxia during experimental heart failure

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny*, v. 55, no. 5, 1963, 37-40

TOPIC TAGS: myocardial hypertrophy, hypoxia, heart weight, EKG, heart resistance, coarctation, aorta, coarctation, aorta

ABSTRACT: Myocardial hypertrophy during compensatory hyperfunction of the heart caused by heart failure and hypertonia has been the subject of many studies. But there is little data on the dependence between an organism's resistance to hypoxia and the degree of hypertrophy development in the heart. Experiments were conducted with rats whose abdominal aorta were coarctated and the lumens constricted to one-third. Four months later the animals were placed in a decompression chamber to simulate high altitude and were "raised" at a constant speed of 2 km/min. After each "elevation" of 1 km, EKG and pneumograms were made. Each animal was "elevated" until it could breathe no longer. After the animal was removed from

Card 1/2

L 12612-63
ACCESSION NR: AP3001506

the chamber the relative weight of the heart was determined and histological investigation was made. All animals with coarctation of the aorta developed myocardial hypertrophy. But the degree of myocardial hypertrophy varied considerably despite the fact that all aortas were constricted in the same way. Moderate hypertrophy does not greatly affect the organism's resistance to acute "altitude" hypoxia. A more developed hypertrophy with relative heart weight of .0041 and over causes a definite decrease in normal resistance. Analyses of ECG changes indicate that with more developed hypertrophy the resistance of an organism to hypoxia is related to lowered functional resistance of the heart. Presented by V. V. Parin, Acting Member AMN SSSR. Orig. art. has: figure, 1 table.

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TITLE: Solving the problem of analytical design of controllers by means of analog computers 9

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ABSTRACT: A. M. Letov (Avtomatika i telemekhanika, vol. 21, no. 4, 5, 6, 1960) suggested a set of linear differential equations that described a control system; he also submitted a solution that included a set of algebraic equations. However, the latter had very hard-to-obtain multiple solutions. The present article offers a set of nonlinear differential equations "equivalent" to the above algebraic. This set is readily solvable by means of an analog computer. Also a mathematical investigation is presented of the necessary and sufficient conditions that make the problem of designing the "optimum controller" solvable. Derivation of these conditions is based on the relations obtained by R. E. Kalman (Proc. Symp. Appl. Mathem., vol. 13, 1962). "The authors are using this opportunity to express their appreciation to N. N. Krasovskiy for discussing this article." Orig. art. has: 1 figure.

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